

## ABSTRACT OF THE DISCLOSURE

A chip-type sensor against ESD and stress damages and contamination interference includes a substrate structure and a protection layer covering over the substrate structure. The protection layer includes, from bottom to top, a first layer  
5 for providing a first stress against the substrate structure, a second layer for providing a second stress against the substrate structure, and a third layer for providing a third stress against the substrate structure. The first stress and the third stress belong to one of a tensile stress and a compressive stress, and the second stress belongs to the other of the tensile stress and the compressive stress.